REMARKS

Reconsideration of this application, in view of the foregoing amendments and the following remarks, is respectfully requested.

Claim Objections

Claims 16-18 are objected to because of certain informalities. These claims have been amended to remove informalities.

Claim Rejections - 35 USC § 112

Claims 1-3 and 13-22 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. Applicants respectfully traverse these rejections.

The Examiner has stated that

> "[c]laims 1-3 and 13-22 recite the claim limitation "13QAM".
> However, the generation of a "13QAM" constellation was not
> described in the specification in such a way as to enable one skilled
> in the art to which it pertains, or with which it is most nearly
> connected, to make and/or use the invention. The examiner has not
> found a prior art reference (or any reference for that fact) which
> discloses the **generation (arrangement) of a "13QAM"
> constellation.**" (Emphasis added).

Applicants respectfully disagree and point to the Examiner that the specification clearly defines 13 QAM constellation and in fact, on page 5, lines 17-22, in equation 3, a clear floating point representation of 13 QAM is described, which can be readily understood and used by one skilled in the art. Further, an application of 13 QAM with a shell mapper is described on page 6, lines 4-7. Applicants believe that specification clearly describes claimed invention for one skilled in the art to practice the invention and accordingly respectfully request the Examiner to withdraw the rejection under 35 USC §112, first paragraph.

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Claim Rejections - 35 USC § 102

Claim 3 is rejected under 35 U.S.C. 102(e) as being anticipated by Ramaswamy et al. (previously cited in Office Action 5/5/2005). Applicants respectfully traverse this rejection.

To anticipate a claim, the reference must teach each and every limitation of the claim. *See* MPEP §2131. As to claim 13, Ramaswamy et al. does not teach all limitations of claim 3. The Examiner has state that Ramaswamy et al. discloses "at least one of 8QAM constellation and **13QAM constellation** (column 2, lines 46-56), wherein 2^3 (odd power of 2) is 8QAM." Applicants respectfully point to the Examiner that Ramaswamy et al. describes two types of constellations 1) even power of two and 2) odd power of two. Neither one of these results in 13 QAM constellation as recited in claim 3. Accordingly, Ramaswamy et al. do not teach every limitation of clai 3 and claim 3 and those depend therefrom are patentably distinguishable from the cited reference.

Claim Rejections - 35 USC§ 103

Claims 1 and 2 are rejected under 35 U.S.C. 103(a) (with regards to the above 101 rejection) as being unpatentable over Ramaswamy et al. (previously cited in Office Action 5/5/2005) in view of Kennard et al. (previously cited in Office Action 5/5/2005) and in further view of Paik et al. (previously cited in Office Action 5/5/2005). Applicants respectfully traverse these rejections.

Regarding claims 1 and 2, the Examiner has cited Ramaswamy et al. as disclosing 13 QAM constellation. As explained above, Ramaswamy et al. does not disclose 13 QAM and therefore the combination of cited references do not teach every limitation of claims 1 and 2 and accordingly, claims 1, 2, and those depend therefrom are patentably distinguishable from the combination of cited references.

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Applicant believes this application and the claims herein to be in a condition for allowance. Please charge any additional fees, or credit overpayment to Deposit Account No. 20-0668. Should the Examiner have further inquiry concerning these matters, please contact the below named attorney for Applicant.

Respectfully submitted,

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